RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _____ 10/575,928 _____

Source: _____ IFWO _____

Date Processed by STIC: _____ 03/28/2007 _____

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IFWO

RAW SEQUENCE LISTING   DATE: 03/28/2007
PATENT APPLICATION: US/10/575,928   TIME: 11:07:46

Input Set : **A:\19746.seq.txt**
Output Set: **N:\CRF4\03282007\J575928.raw**

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 3 <110> APPLICANT: Ward, Larry D.
 4         Thomson, Helen
 6 <120> TITLE OF INVENTION: Poxvirus vector encoding retrovirus (eg HIV) and cytokine
 8 <130> FILE REFERENCE: 19746
10 <140> CURRENT APPLICATION NUMBER: 10/575,928
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C--> 11 <141> CURRENT FILING DATE: 2006-04-14
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13 <150> PRIOR APPLICATION NUMBER: AU 2003905642
14 <151> PRIOR FILING DATE: 2003-10-15
16 <150> PRIOR APPLICATION NUMBER: AU 2003905683
17 <151> PRIOR FILING DATE: 2003-10-16
19 <160> NUMBER OF SEQ ID NOS: 7
21 <170> SOFTWARE: PatentIn version 3.2
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25 <212> TYPE: DNA
26 <213> ORGANISM: Human immunodeficiency virus
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39             20                  25                  30
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45 ggc ctg tta gaa aca tca gaa ggc tgc aga caa ata ttg gga cag cta      192
46 Gly Leu Leu Glu Thr Ser Glu Gly Cys Arg Gln Ile Leu Gly Gln Leu
47     50                  55                  60
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51 65                  70                  75                  80
53 aca gta gca acc ctc tat tgt gta cat caa agg ata gat gta aaa gac      288
54 Thr Val Ala Thr Leu Tyr Cys Val His Gln Arg Ile Asp Val Lys Asp
55                 85                  90                  95
57 acc aag gaa gct tta gag aag ata gag gaa gag caa aac aaa agt aag      336
58 Thr Lys Glu Ala Leu Glu Lys Ile Glu Glu Glu Gln Asn Lys Ser Lys
59             100                 105                 110
61 aaa aag gca cag caa gca gca gct gca gct ggc aca gga aac agc agc      384
62 Lys Lys Ala Gln Gln Ala Ala Ala Ala Ala Gly Thr Gly Asn Ser Ser
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65 cag gtc agc caa aat tac cct ata gtg cag aac cta cag ggg caa atg      432
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67     130                    135                    140
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71 145                    150                    155                160
73 gta gaa gaa aag gct ttc agc cca gaa gta ata ccc atg ttt tca gca      528
74 Val Glu Glu Lys Ala Phe Ser Pro Glu Val Ile Pro Met Phe Ser Ala
75                165                    170                    175
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78 Leu Ser Glu Gly Ala Thr Pro Gln Asp Leu Asn Thr Met Leu Asn Thr
79             180                    185                    190
81 gtg ggg gga cat caa gca gcc atg caa atg tta aaa gag act atc aat      624
82 Val Gly Gly His Gln Ala Ala Met Gln Met Leu Lys Glu Thr Ile Asn
83          195                    200                    205
85 gag gaa gct gca gaa tgg gat aga gtg cat cca gtg cat gca ggg cct      672
86 Glu Glu Ala Ala Glu Trp Asp Arg Val His Pro Val His Ala Gly Pro
87     210                    215                    220
89 att gca cca ggc caa atg aga gaa cca agg gga agt gac ata gca gga      720
90 Ile Ala Pro Gly Gln Met Arg Glu Pro Arg Gly Ser Asp Ile Ala Gly
91 225                    230                    235                240
93 act act agt acc ctt cag gaa caa ata gga tgg atg aca aat aat cca      768
94 Thr Thr Ser Thr Leu Gln Glu Gln Ile Gly Trp Met Thr Asn Asn Pro
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137 aga tgt gga agg gaa gga cac caa atg aaa gat tgc act gag aga cag          1296
138 Arg Cys Gly Arg Glu Gly His Gln Met Lys Asp Cys Thr Glu Arg Gln
139                 420             425             430
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166     50                  55                  60
169 Gln Pro Ser Leu Gln Thr Gly Ser Glu Glu Leu Arg Ser Leu Tyr Asn
170 65                  70                  75                  80
173 Thr Val Ala Thr Leu Tyr Cys Val His Gln Arg Ile Asp Val Lys Asp
174             85                  90                  95
177 Thr Lys Glu Ala Leu Glu Lys Ile Glu Glu Glu Gln Asn Lys Ser Lys
178                 100                 105                 110
181 Lys Lys Ala Gln Gln Ala Ala Ala Ala Gly Thr Gly Asn Ser Ser
182         115                 120                 125
185 Gln Val Ser Gln Asn Tyr Pro Ile Val Gln Asn Leu Gln Gly Gln Met
186     130                 135                 140
189 Val His Gln Ala Ile Ser Pro Arg Thr Leu Asn Ala Trp Val Lys Val
190 145                 150                 155                 160
193 Val Glu Glu Lys Ala Phe Ser Pro Glu Val Ile Pro Met Phe Ser Ala
194                 165                 170                 175
197 Leu Ser Glu Gly Ala Thr Pro Gln Asp Leu Asn Thr Met Leu Asn Thr
198                 180                 185                 190
201 Val Gly Gly His Gln Ala Ala Met Gln Met Leu Lys Glu Thr Ile Asn
202             195                 200                 205
205 Glu Glu Ala Ala Glu Trp Asp Arg Val His Pro Val His Ala Gly Pro
206     210                 215                 220
209 Ile Ala Pro Gly Gln Met Arg Glu Pro Arg Gly Ser Asp Ile Ala Gly
210 225                 230                 235                 240
213 Thr Thr Ser Thr Leu Gln Glu Gln Ile Gly Trp Met Thr Asn Asn Pro
214                 245                 250                 255
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221 Asn Lys Ile Val Arg Met Tyr Ser Pro Thr Ser Ile Leu Asp Ile Arg
222         275             280             285
225 Gln Gly Pro Lys Glu Pro Phe Arg Asp Tyr Val Asp Arg Phe Tyr Lys
226     290             295             300
229 Thr Leu Arg Ala Glu Gln Ala Ser Gln Asp Val Lys Asn Trp Met Thr
230 305             310             315             320
233 Glu Thr Leu Leu Val Gln Asn Ala Asn Pro Asp Cys Lys Thr Ile Leu
234             325             330             335
237 Lys Ala Leu Gly Pro Ala Ala Thr Leu Glu Glu Met Met Thr Ala Cys
238             340             345             350
241 Gln Gly Val Gly Gly Pro Gly His Lys Ala Arg Val Leu Ala Glu Ala
242         355             360             365
245 Met Ser Gln Val Thr Asn Pro Ala Asn Ile Met Met Gln Arg Gly Asn
246     370             375             380
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250 385             390             395             400
253 Gly His Ile Ala Lys Asn Cys Arg Ala Pro Arg Lys Lys Gly Cys Trp
254             405             410             415
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282             20              25              30
284 gtt tgg gga gga gaa aac aac tcc ctc tca gaa gca gga gcc gat aga     144
285 Val Trp Gly Gly Glu Asn Asn Ser Leu Ser Glu Ala Gly Ala Asp Arg
286         35              40              45
288 caa gga act gta tcc ttt aac ttc cct cag atc act ctt tgg caa cga     192
289 Gln Gly Thr Val Ser Phe Asn Phe Pro Gln Ile Thr Leu Trp Gln Arg
290     50              55              60
292 ccc ctc gtc aca ata agg ata ggg ggg caa cta aag gaa gct cta tta     240
293 Pro Leu Val Thr Ile Arg Ile Gly Gly Gln Leu Lys Glu Ala Leu Leu
294 65              70              75              80
296 gat aca gga gca gat gat aca gta tta gaa gaa atg aat ttg cca gga     288
297 Asp Thr Gly Ala Asp Asp Thr Val Leu Glu Glu Met Asn Leu Pro Gly
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300 aaa tgg aaa cca aaa atg ata ggg gga att gga ggt ttt atc aaa gta    336
301 Lys Trp Lys Pro Lys Met Ile Gly Gly Ile Gly Gly Phe Ile Lys Val
302             100                 105                 110
304 aga cag tac gat cag ata cct gta gaa atc tgt gga cat aaa gct ata    384
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306             115                 120                 125
308 ggt aca gta tta gta gga cct aca cct gtc aac ata att gga aga aat    432
309 Gly Thr Val Leu Val Gly Pro Thr Pro Val Asn Ile Ile Gly Arg Asn
310         130                 135                 140
312 ctg ttg act cag att ggt tgt act tta aat ttc ccc att agt cct att    480
313 Leu Leu Thr Gln Ile Gly Cys Thr Leu Asn Phe Pro Ile Ser Pro Ile
314 145                 150                 155                 160
316 gaa act gta cca gta aaa tta aag cca gga atg gat ggc cca aaa gtt    528
317 Glu Thr Val Pro Val Lys Leu Lys Pro Gly Met Asp Gly Pro Lys Val
318                 165                 170                 175
320 aag caa tgg cca ttg aca gaa gaa aaa ata aaa gca tta gta gag ata    576
321 Lys Gln Trp Pro Leu Thr Glu Glu Lys Ile Lys Ala Leu Val Glu Ile
322             180                 185                 190
324 tgt aca gaa atg gaa aag gaa ggg aaa att tca aaa att ggg cct gaa    624
325 Cys Thr Glu Met Glu Lys Glu Gly Lys Ile Ser Lys Ile Gly Pro Glu
326             195                 200                 205
328 aat cca tac aat act cca gta ttt gct ata aag aaa aaa gac agt act    672
329 Asn Pro Tyr Asn Thr Pro Val Phe Ala Ile Lys Lys Lys Asp Ser Thr
330         210                 215                 220
332 aaa tgg aga aaa cta gta gat ttc aga gaa ctt aat aaa aga act caa    720
333 Lys Trp Arg Lys Leu Val Asp Phe Arg Glu Leu Asn Lys Arg Thr Gln
334 225                 230                 235                 240
336 gac ttc tgg gaa gtt cag tta gga ata cca cac ccc gca ggg tta aaa    768
337 Asp Phe Trp Glu Val Gln Leu Gly Ile Pro His Pro Ala Gly Leu Lys
338                 245                 250                 255
340 aag aaa aaa tca gta aca gta ttg gat gtg ggt gat gca tac ttt tca    816
341 Lys Lys Lys Ser Val Thr Val Leu Asp Val Gly Asp Ala Tyr Phe Ser
342             260                 265                 270
344 gtt ccc tta gat aaa gac ttt aga aag tat act gca ttt acc ata cct    864
345 Val Pro Leu Asp Lys Asp Phe Arg Lys Tyr Thr Ala Phe Thr Ile Pro
346             275                 280                 285
348 agt ata aac aat gag aca cca ggg att aga tat cag tac aat gtg ctg    912
349 Ser Ile Asn Asn Glu Thr Pro Gly Ile Arg Tyr Gln Tyr Asn Val Leu
350         290                 295                 300
352 cca cag gga tgg aaa gga tca cca gca ata ttc caa agt agc atg aca    960
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354 305                 310                 315                 320
356 aaa atc tta gag cct ttt aga aaa cag aat cca gac ata gtt atc tat    1008
357 Lys Ile Leu Glu Pro Phe Arg Lys Gln Asn Pro Asp Ile Val Ile Tyr
358             325                 330                 335
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VERIFICATION SUMMARY DATE: 03/28/2007
PATENT APPLICATION: **US/10/575,928** TIME: 11:07:47

Input Set : **A:\19746.seq.txt**
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L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date